



**Northwestern University
Center for Public Safety**

1801 Maple Ave
Evanston, IL 60208
800-323-4011



**NORTHWESTERN
UNIVERSITY**

The Northwestern University Center for Public Safety is pleased to announce the presentation of two transportation engineering continuing education training courses in Phoenix: "Highway Capacity Workshop--Arterial Streets and Intersections" and "Intersection Design and Channelization Workshop." These courses will be presented in cooperation with the Arizona Department of Transportation during the week of April 16-20, 2007.

HIGHWAY CAPACITY WORKSHOP--ARTERIAL STREETS AND INTERSECTIONS

**Phoenix, Arizona
FEE: \$725**

**April 16-18, 2007
1.9 CEU's**

This 2 1/2-day workshop focuses on the materials and techniques of capacity analysis related to arterial street systems and intersections (signalized and unsignalized). Principles and procedures of capacity analysis contained in the 2000 *Highway Capacity Manual* will be presented in this course.

Each participant receives a copy of the *Highway Capacity Manual* plus a coordinated series of work problems. Available computer programs for capacity analysis will be demonstrated.

Who Should Attend

This course is designed for engineers and technicians who will apply the principles of capacity analysis to problems of planning and design of proposed facilities and to operation and control of existing street and highway systems. The participants may be traffic, design, highway planning, or urban planning engineers or technicians. In addition to lectures, extensive time will be devoted to work-problem sessions and discussions.

Content

Signalized Intersections

- Design and operations technique for detailed capacity analysis
- Planning technique for "first cut" capacity analysis

Unsignalized Intersections

- All-way STOP controlled intersections
- Two-way STOP controlled intersections
- Roundabouts

Urban and Suburban Arterials

- Level of service analysis of extended lengths of arterial streets with closely spaced signalized intersections

INTERSECTION DESIGN AND CHANNELIZATION WORKSHOP

Phoenix, Arizona
FEE: \$675

April 18-20, 2007
1.9 CEU's

Note: This course begins at 1:00 p.m. on Wednesday April 18th

Intersection design must respond to the unique needs and constraints of each particular location and does not lend itself to standardized, "cook-book" solutions. The design must respond to such intersection characteristics as traffic volumes, type of design vehicles, design speed, functional characteristics, type of intersection control, and the topographic constraints of the location. The design must begin with the objectives of optimizing the quality of traffic flow and maximizing the safety of motor vehicle, bicycle, and pedestrian traffic. These objectives must be achieved within the context of construction, operating, and user costs, availability of right-of-way and effect on roadside development, environmental and aesthetic concerns, and many other considerations.

The instruction emphasizes the principles of intersection and channelization design, identification and treatment of intersection deficiencies, and redesign of existing intersections. The workshop includes lecture sessions and discussions of intersection design case studies. Design projects are used to give participants the opportunity to apply the principles and design techniques discussed in the course. Each participant receives a notebook containing detailed lecture notes and class project materials.

Who Should Attend

This 2 1/2-day workshop is intended for geometric design and traffic engineers who are involved in rural or urban intersection design.

Content

Principles of Intersection Design

- Design controls
- Intersection sight distance
- Lane width
- Alignment and profile
- Treatment of turning movements
- Roundabout design
- Pedestrian accommodation and ADA requirements

Principles and Techniques of Channelization

- Purposes of channelization
- Island types and locations
- Coordination with traffic control devices
- Design techniques

Identification and Treatment of Deficiencies

- Interpretation of crash patterns
- Guidelines for intersection improvements
- Case studies

Course Location

These training courses will be presented in cooperation with the Arizona Department of Transportation. The classroom is located in the Arizona DOT Training Center, 1130 N. 22nd Avenue in Phoenix. The Highway Capacity Workshop--Arterial Streets and Intersections will end at 12:00 noon on Wednesday April 18th and the Intersection Design and Channelization Workshop will begin at 1:00 p.m. on Wednesday April 18th so you can register for both courses if desired.

Registration and Additional Information

Register on our web site at <http://nucps.northwestern.edu> or fill out the attached registration form and mail or fax it to the Northwestern University Center for Public Safety. For questions or additional information, contact Robert Seyfried, Director, Transportation Safety Division, Northwestern University Center for Public Safety by phone at 800-323-4011 or by e-mail at r-seyfried@northwestern.edu

Discount for Multiple Enrollments

Send one student for the full tuition fee; a second and any additional students from the same organization receive a 25% discount on their tuitions.

Transportation Engineering Program Application Form

Title	Mr. / Ms. / Mrs.	First Name	M. I.	Last Name
PERSONNEL INFORMATION: Please indicate the location where you may best be reached			BILLING INFORMATION: Please indicate where we may send billing inquiries.	
<input type="checkbox"/> Home <input type="checkbox"/> Business Office <input type="checkbox"/> Department Office Address at the above location			Agency/ Business	
Street Address			Agency Contact	
Apt./ Suite #			Apt./ Suite #	
City	State		City	State
Zip	Country		Zip	Country
Phone	Gender	M / F	Phone	
E-mail			Fax	
COURSE INFORMATION:				
Course Title				
Course Starting Date				
PAYMENT INFORMATION				
Purchase Order # or Credit Card #				
Credit Card Type		<input type="checkbox"/> Visa Card <input type="checkbox"/> Master Card <input type="checkbox"/> American Express Card		
Expiration Date				
Return To:		Fax To: 847 / 491 – 5270		Questions: Bob Seyfried 800 - 323 - 4011
NUCPS Registration P. O. Box 1409 Evanston IL 60204				